

1. Graph quadrilateral $ABCD$ with vertices $A(0, 3)$, $B(2, 3)$, $C(3, 1)$, and $D(2, 0)$.

2. Graph the dilation with a scale factor $k = 3$. Label the new quadrilateral $FGHJ$

F (_____, _____)

G (_____, _____)

H (_____, _____)

J (_____, _____)

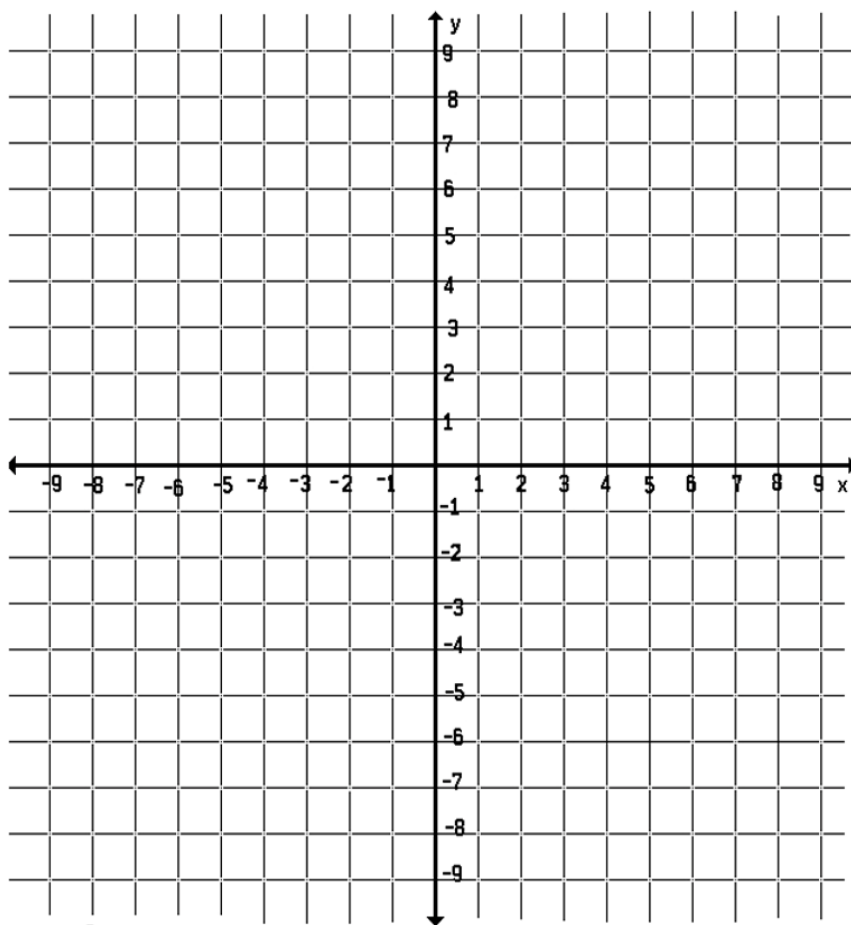
3. Graph the reflection of $FGHJ$ across the y -axis. Label this quadrilateral $KLMN$ and list the vertices below:

K (_____, _____)

L (_____, _____)

M (_____, _____)

N (_____, _____)



4. Graph the reduction of $KLMN$ with a scale factor $k = \frac{1}{3}$. Label this quadrilateral $OPQR$ and list the vertices below:

O (_____, _____)

P (_____, _____)

Q (_____, _____)

R (_____, _____)

5. Now translate $OPQR$ 1 units left and down 4 units. Label this quadrilateral $WXYZ$ below and graph

W (_____, _____)

X (_____, _____)

Y (_____, _____)

Z (_____, _____)

A summary of transformations on a coordinate plane

Transformation	How to change coordinates
Dilation	
Reduction	
y-axis reflection	
x-axis reflection	
Translation	